

Commentary: Adopting mobile health applications by nurses: a scoping review

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To say that technology particularly mobile technology has advanced in the last couple of years would be an understatement, especially its use in health and social care. In terms of nursing and midwifery, the world has seen the professions both challenged by a global pandemic, affecting all aspects of health and social care, but remarkably embracing, collaborating, and leading in digital health technological solutions. Mobile applications have been a particular growth area. In 2016 half of the world's population was connected with a smartphone. In January 2021 there were 4.66 billion (59.5% of the global population) active internet users worldwide; and of these 92.6% (4.32 billion) accessed the internet via mobile devices (Johnson, 2021).

During the global pandemic digital health exploded forward and mid-pandemic we continue to observe how digital health technology is changing and becoming integral parts of service delivery (Mold et al., 2021). Mobile health applications have been flourishing in areas of healthcare, for example adolescent mental health services in providing digital support for social and personal problems (Martin et al., 2020) and midwifery services for pregnant and new mums before the pandemic (MSENFT, 2020). So, this paper is certainly very timely and looks at the international literature available.

One recent observation in this digital health advancement during the pandemic is how nurses and midwives are leading and are change agents in patient care initiatives (Burdett Trust for Nursing, 2021). In the UK the NHS Long Term Plan (2019) set out a wide-ranging plans and funded programmes to upgrade technology and digitally enabled care across the NHS in England. Today these investments have sped up with the COVID-19 pandemic and enabled wide ranging digital access to services, enabling patients and carers to better manage their health and conditions (Maguire et al., 2021). With readily available access, clinicians can interact with patient records and care plans wherever they are, with ready access to decision support and AI, removing administrative barriers.

This scoping review is timely because there has been an exponential growth in the mobile health market and app usage over the years within what was thought to be a saturated market. What has not been dominant however is how we evaluate the perceived value in these apps in the day-to-day use within nursing care. This paper provides an interesting stance on examining the evidence of what is used in nursing practice providing insight into global usage of apps, how and where they are used.

The research questions focused on two areas: What reasons and purposes do nurses use mobile health applications? What are the effective factors in nurses' use of health mobile applications?

In the scoping review of 2063 articles, 25 articles were deemed appropriate for use in the review and covered a 20-year span across 15 countries. The review identified five main themes in which nurses use of mobile health applications categorising them "learning and knowledge enhancement", "treatment and improvement of the patient care process", "improve the diagnosis process", "data and patient management", and "health promotion".

The article goes on to detail and tabulate 52 subthemes, identifying a wide range of mobile health applications for nursing practice.

The other area of review was how nurses effectively used these mobile health applications which was categorised into 8 themes including “ease of use”, “usefulness”, “security and confidentiality”, “feasibility and functionality”, “design and use – interface”, “effectiveness”, “infrastructure” and “social norms and versatility”, of which the authors identified 66 subthemes.

The authors present the 25 articles that were reviewed and discuss the themes comprehensively, showing that mobile health applications are a promising tool for the support and advancing healthcare. It would appear the uptake and how effective they are for nurses is increasing despite the challenges. COVID-19 has presented several challenges globally across healthcare, but one of its benefits has been speeding up digital health application usage.

However, the pandemic has also highlighted health disparities in terms of digital health such as technology deprivation, poor digital literacy both in patients and nurses and additionally the lack of resources for services in parts of the world (Maguire et al., 2021). While this paper focuses on mobile health application, it highlights the advancement of digital health technology but also reminds us of the challenges associated with mobile health use. It places nurses and midwives in a highly informed position, leading and designing digital health applications for healthcare services they already lead in. Additional challenges include digital education and ensuring the workforce of the future is upskilled and prepared for digital engagement, digitalised interventions including education programmes that reflect a level of digital engagement (NHSX 2021). In England NHSX (2021) mission is to ensure nurses and midwives have a voice in digital transformation at all levels of the system as well as leveraging digital technologies in innovative ways to enable safer care.

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